REMARKS

Reconsideration of the above identified application in view of the preceding amendment and following remarks is respectfully requested. By this amendment, Applicant has cancelled claims 4, 8, 10, 12, 19, 23, 25, and 27 without prejudice to Applicant's rights therein and added new claims 31-42. Claims 1-3, 5, 6, 7, 9, 11, 13-18, 20-22, 24, 26, 28-42 are presently pending in this application. It is respectfully submitted that no new matter had been added by these amendments.

The invention provides a computer-implemented method for compiling demographic data based on interactions between customers and merchants. Interaction data representing interactions between customers and merchants is stored in an interaction database, the interaction database comprising interaction data of interactions involving different merchants. Demographic data representing existing and/or prospective customers of two or more merchants is stored in a demographics database. The invention described by the applicant provides a merchant or other entity with a report involving data retrieved from the interaction and demographics databases which provides the merchant with characteristics and other information about actual and prospective customers.

Prior art methods and systems have the disadvantage that a merchant needs a list of customers before the merchant can prepare a report. In the prior art, the merchant must collect and store demographic and/or interaction data from an existing customer base. An improvement provided by the invention is the ability to provide reports to small merchants who do not have a large customer list.

A further disadvantage of the prior art methods and systems is that a merchant does not necessarily know the identity of a particular customer purchasing goods or services from that merchant. The merchant needs to maintain a sophisticated customer database in order to match customer interactions or activity with the identities of the customers. The improvement provided by the invention is that merchants for whom reports are generated do not need to know customer identities. The interaction database and the demographic database are structured and contain suitable data so that a

merchant can generate a report based solely on this interaction data and demographics data.

In the Office Action, the Examiner objected to Claim 5 under 37 C.F.R. 1.75(c) as being in improper form because of a multiple dependent Claim 4. Applicant has cancelled Claim 4 and therefore, respectfully submits that the cancellation obviates the objection and Claim 5 is now in condition for allowance.

Referring to item 4, in the Office Action, the Examiner rejected claims 1-4, 6-7, 14-22 and 29 to 30 under 35 USC 103(a) as being unpatentable over US patent 5,717,923 to Dedrick, US patent 6,029,150 to Kravitz and US patent 6,073,112 to Geerlings.

US specification 5,717,923 to Dedrick describes a system for targeting advertisements to users of a computer network, for example the Internet. The system makes use of a personal profile database which contains electronic information about users of the system. The system includes a client activity monitor which monitors user reactions to electronic content as it is presented to each user. The activity monitor takes note of which content is consumed or provokes action and which content is ignored. The personal profile database is updated based on the information collected by the activity monitor.

The purpose of the Dedrick system is to enable the monitoring of actions taken by an individual user in consuming electronic information and customising subsequent electronic information for that individual user based on these previous actions. The purpose is also to provide a system which furnishes the electronic information providers with a substantial amount of information about existing and potential markets while maintaining individual consumer privacy.

US specification 6,029,150 to Kravitz describes a method for making electronic payment for goods purchased online through an agent. Customers have an account with the agent. When a customer wishes to purchase an item from a merchant, the customer obtains an authenticated quote from the appropriate merchant including goods, list and price. The customer then sends a request to the agent for payment of the quoted price to the particular merchant, along with the customer's unique account identifier. The agent processes the request and sends a payment advice message to the

customer who forwards a portion of this to the merchant. Upon receiving the payment advice message, the merchant sends the goods to the customer.

Kravitz describes a system and method for payment and transactions in an electronic payment system. The purpose of the system is to provide a secure payment system which also provides privacy. For this reason, the invention requires transactional anonymity with an audit trail.

US patent specification 6,073,112 to Geerlings describes a system which assists merchants in reaching customers by providing information about when to contact each customer and what information to try and pass on to the customer. The system monitors shopping behaviour and continuously refines customer segmentation accordingly. The Geerlings system contains two databases, one containing demographic and shopping activity information about recipients of communications, and the second database containing information about desired communication times and content. The Geerlings specification describes the capability to report on communications attempted and to present customer/recipient groupings.

The applicant's invention provides a method and related system which:

- Compiles demographic data based on interactions between customers and merchants;

- Stores interaction data representing interactions between customers and merchants in an interaction database, the interaction database having stored in it interactions involving different merchants;

- Stores demographic data representing existing and/or prospective customers of two or more merchants in a demographic database; and

- Generates a report giving characteristics and other information about actual and/or prospective customers of one or more merchants.

Referring to item 5, Dedrick describes the use of a personal profile database, as described in column 5, lines 50 to 59, which maintains user profile data for an end user of a client system. This user profile data could include age, gender, income, marital status, color preferences, and so on. The personal profile database could also

store credit card numbers, social security numbers, mailing addresses, preferred shipping methods.

As described in column 5, lines 60 to 62, the personal profile database can be updated with user profile information based on activity monitored by a client activity monitor.

As described in column 5, lines 34 to 49, the client activity monitor tracks, for example, the color of fields or objects that are selected most frequently and less frequently by the end user. Similarly, the consumption format chosen most frequently and less frequently by the end user, such as audio or video, is also tracked and stored in the personal profile database.

The data stored in the personal profile database, for example color preferences, does not necessarily represent interactions between customers and merchants, particularly interactions involving different merchants. Rather, the personal profile database is updated as a result of interactions between customers and merchants. The personal profile database can be modified directly by the end user and so the personal profile database does not necessarily represent interactions between customers and merchants, as the results of those interactions and the preferences identified from those interactions can be overridden directly by the user.

Dedrick describes demographic information at column 3, lines 43-46 as vital statistics of individuals, such as age, sex, income and marital status. The demographic information is referred to as user profile data. The end user enters user profile data on a client system which is then transferred to a metering server. Identifying data of the user, for example name and phone number are not transferred to the metering server. Referring to column 7, lines 23-25, a statistic compilation process compiles this user profile data contained in the personal profile database and transfers the compiled data to the metering server. All of the user profile data is then compiled except for information which identifies a particular individual.

Referring to column 12, lines 7-11, a series of clearinghouse servers each contain a demographic database which in turn contains user profile data collected from the metering servers.

Dedrick describes the storing of demographic data representing existing customers only. If a user does not have a personal profile database, demographic data cannot be transferred from this personal profile database to a metering server and in turn to a demographic database. The Dedrick system therefore does not have the capability to store demographic data representing prospective customers. The ability to store demographic data on prospective customers is particularly important for a merchant, particularly where a merchant does not have a large customer base. Dedrick does not provide this facility and does not teach or suggest storing demographic data representing prospective customers of two or more merchants.

Referring to column 10, lines 3-12, an end user may request to view certain information. The user profile database is checked to determine whether the end user is a subscriber of that information and if the end user is a subscriber of that information, information is requested from the content database and transmitted to the end user. Data is simply retrieved from the user profile database in order to determine whether information should be transferred to an end user. By contrast, the invention as claimed in claim 1 retrieves data from both an interaction database and a demographics database.

Furthermore, Dedrick does not teach or suggest the generation of reports. Rather, the Dedrick system is limited to identifying whether or not a particular user should receive a particular piece of information, and if that user should receive that particular piece of information, in what format would the user most desire it.

The Dedrick system does not teach or suggest storing interaction data representing interactions between customers and merchants in an interaction database, the interaction database having stored in it interactions involving different merchants, nor does it teach or suggest storing demographic data representing existing and/or prospective customers of two or more merchants in a demographic database. Furthermore, it does not teach or suggest generating a report giving characteristics and other information about actual and/or prospective customers of one or more merchants.

Similar considerations apply to claim 16.

Referring to item 6-1, Kravitz describes a method of payment in an electronic commerce system wherein customers have accounts with an agent and where

each customer shares a respective secret between that the customer and the agent. The customer obtains an authenticated quote from a specific merchant, the quote including a specification of goods and a payment amount for those goods. The customer then sends the agent, in a single authenticated one-pass communication, a payment request message representing a request for payment of the payment amount to the specific merchant along with a unique identification of the customer. The agent, after processing the payment request, issues and sends the customer, in a single one-pass communication, an authenticated verifiable payment advice message. Upon receipt of the payment advice message, the customer forwards a portion of the payment advice message to the merchant. The merchant then provides the goods to the customer in response to receiving the portion of the payment advice message.

Referring to columns 11 and 12, customers and merchants interact via customer network software and merchant network software over a communications channel. The examiner states it is obvious to store data representing such interactions between customers and merchants in a computer memory.

The main focus of the Kravitz specification is to facilitate payment for goods over the Internet. Kravitz does not describe compiling demographic data based on interactions between customers and merchants. Kravitz does not describe storing demographic data representing existing and/or prospective customers of two or more merchants in a demographic database, nor does it describe the generation of a report giving characteristics and other information about actual and/or prospective customers of one or more merchants.

It is not obvious to combine Kravitz with Dedrick. In Kravitz, the process requires that each customer and each merchant have a unique identifier for use in the transaction process. Dedrick, on the other hand, does not uniquely identify merchants. There is no suggestion in Dedrick, nor is there any advantage described in Dedrick, for identifying such merchants. The main focus of the system described in Dedrick is to compile accurate personal profiles of existing customers for use by others.

Furthermore, Dedrick regards interactions as including both a consumer's action and a consumer's inaction. Kravitz, on the other hand, requires action by a

customer in all cases and does not teach or suggest storing interactions between customers and merchants in which a customer does not perform any action.

Similar considerations apply to claim 16.

Referring to item 6-2, Geerlings describes a system which assists the merchants in reaching customers by providing information about when to contact each customer and what information to attempt to convey. The system described in Geerlings involves a plurality of merchants and a plurality of customers. Each merchant maintains a marketing database storing customer information of a merchant, and a strategy database storing plans or outlines of desired communications from the merchant to his or her customers.

Referring to column 4, lines 24-33, the merchant compiles certain information regarding his customers, including shopping activity, name, address, email address, phone number, facsimile number, age and so on. This information is stored in a merchant marketing database. There is a separate marketing database for each merchant, and each marketing database includes only existing customers of a particular merchant. The marketing database does not include prospective customers of a merchant.

The marketing database also includes shopping activity, for example purchase history by a customer, other visits or communications from the customer and so on. This shopping activity is updated by the merchant, by example from the merchant's billing, invoicing and other systems.

The Geerlings system also includes a strategy database. Referring to column 4, lines 51-56, there is a different strategy database for each different merchant, such that there is one strategy database for each merchant. The strategy database for each merchant holds a set of plan outlines/working programmes. These working programmes may be combined into campaigns consisting of merchant-defined consecutive communications. Each plan outline/working programme identifies the type of customer to whom the communication is to be sent, the contents of the communication, the date or timing of the communication, the desired communication channel and the destination. Referring to column 9, lines 57-62, the system may also include allocation filters to further specify the customers of a merchant to whom communications should be sent.

The Geerlings system describes the use of interaction databases between customers and merchants, as each merchant maintains a marketing database for his or her customers, the marketing database being updated with customer shopping activity. In contrast to the present invention, the interactions between customers and merchants stored in each interaction database do not involve different merchants in Geerlings. Rather, each merchant maintains a separate interaction database.

Furthermore, the data stored in the interaction databases does not extend beyond existing customers of a particular merchant. Although some demographic data may be stored in the interaction database, this demographic data relates to existing customers of a particular merchant only and does not extend to existing and/or prospective customers of two or more merchants.

Referring to column 1, lines 24-29, Geerlings describes regression analysis as providing a profile of a merchant's existing customers or prospective new customers based on trackable criteria, such as zipcode, gender and the like. However, regression analysis is described in Geerlings as being a traditional technique and points out a disadvantage of this and other traditional techniques in that such techniques typically only look to profiles or groupings of types of people to predict behavior of a customer group. That is, most of the currently available analysis techniques create simulated behavior profiles from which behavior of customers are inferred. Geerlings teaches that it is more accurate to look to individual or unique desires of people which affect their shopping behavior. Shopping behavior is described in Geerlings as relating to existing customers of a particular merchant. In this way, Geerlings teaches away from the storing or use of data representing existing and/or prospective customers of one or more merchants.

Geerlings describes in column 15, lines 2-13 the use of a report database which can be configured for coupling to a merchant's desired reporting software package. Alternatively, reporting may be made available online such as through the Internet. The reporting described in Geerlings is limited to the data stored in the marketing database and strategy database of each merchant. These databases do not provide a means for generating a report involving customers of two or more merchants. Nor does the system

describe the generation of a report involving prospective customers of one or more merchants.

As stated above, it is not obvious to combine Kravitz with Dedrick. Kravitz requires that each customer and each merchant have a unique identifier for use in the transaction process. Dedrick, on the other hand, does not uniquely identify merchants. There is no suggestion in Dedrick, nor is there any advantage described in Dedrick, for identifying such merchants. Geerlings describes a system in which each merchant maintains a marketing database storing customer information of a particular merchant. The reporting tools described in Geerlings are limited to the data stored in the marketing database of each merchant.

It is not obvious to combine Geerlings with Dedrick and Kravitz. Kravitz requires that each customer and each merchant have a unique identifier for use in the transaction process, whereas Dedrick on the other hand does not uniquely identify merchants. In Geerlings, each merchant maintains a separate interaction database which would not work with the systems described in Kravitz and Dedrick. It is not obvious to combine Dedricks, Kravitz and Geerlings.

By storing interaction data representing interactions involving different merchants, and by storing demographic data representing existing and/or prospective customers of two or more merchants, the present applicant is able to generate far superior reports based on this stored data than that which is either described or suggested by Kravitz, Dedrick or Geerlings, or by a combination of Dedrick, Kravitz and Geerlings.

The same considerations apply to claim 16.

Referring to item 7, Dedrick describes use of a personal profile database, as described in column 5, lines 50-59. The system maintains user profile data for an end user of a client system. This user profile data is also referred to as demographic information. Dedrick does not describe or suggest maintaining an interaction database separate from a demographics database. Similar considerations apply to claim 17.

Referring to item 8, Dedrick describes the use of a personal profile database. The personal profile database maintains user profile data for an end user of a client system. This user profile data is referred to as demographic information. The data stored in this personal profile database does not necessarily represent interactions

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between customers and merchants. The personal profile database is updated as a result of interactions between customers and merchants and can be modified directly by the end user. Therefore, the personal profile database does not necessarily represent interactions between customers and merchants, as the results of those interactions and the preferences identified from those interactions can be overridden directly by the user. Dedrick does not describe or suggest maintaining a single database functioning as an interaction database and a demographics database. Similar considerations apply to claim 18.

With reference to item 9, we propose to cancel claim 4 and claim 19.

Referring to item 10, claim 5 as amended is not rendered obvious by Kravitz. Kravitz describes the use of date and time data in a transaction table in column 14, lines 35 and 36. However, the main focus of Kravitz is to facilitate payment for goods over the Internet. It is not obvious to combine Kravitz with Dedrick. Kravitz does not describe compiling demographic data based on interactions between customers and merchants. Kravitz does not describe storing demographic data representing existing and/or prospective customers of two or more merchants in a demographic database, nor does it describe the generation of a report giving characteristics and other information about actual and/or prospective customers of one or more merchants.

Similar arguments apply to claim 20.

In relation to item 11, Kravitz at column 14, line 37, describes storing a monetary value. However, it is not obvious to combine Kravitz with Dedrick. Kravitz does not describe compiling demographic data based on interactions between customers and merchants. Kravitz does not describe storing demographic data representing existing and/or prospective customers of two or more merchants in a demographic database, nor does it describe the generation of a report giving characteristics and other information about actual and/or prospective customers of one or more merchants.

Similar considerations apply to claim 21.

Referring to item 12, Dedrick stores data in a personal profile database. This data does not necessarily represent interactions between customers and merchants, as it can be modified directly by the end user. Kravitz at column 11, lines 51-55, describes commercial transactions and these commercial transactions can be between customers and merchants.

However, it is not obvious to combine Kravitz with Dedrick. Kravitz requires that each customer and each merchant have a unique identifier for use in the transaction process. Dedrick, on the other hand, does not uniquely identify merchants. There is no suggestion in Dedrick for identifying such merchants. Similar considerations apply to claim 22.

Referring to item 13, present claim 14 introduces the feature that the report includes demographic data representing the customers of a merchant. Geerlings describes in column 15, lines 2-13, the use of a report database which can be configured for coupling to a merchant's desired reporting software package. The reporting described in Geerlings is limited to the data stored in the marketing database and strategy database of each merchant. These reports do not involve customers of two or more merchants. These reports do not involve prospective customers of one or more merchants.

Dedrick describes the use of demographic information, for example at column 3, lines 43-46. However, this demographic data represents existing customers and not prospective customers. Kravitz describes customers and merchants interacting via customer network software and merchant network software over a communications channel. It is not obvious to combine Geerlings with Dedrick, nor is it obvious to combine Geerlings and Dedrick together with Kravitz. Similar considerations apply to claim 29.

Referring to item 14, claim 15 introduces the feature that the report includes demographic data representing the customers of two or more merchants. Geerlings describes the use of a report database which can be configured for coupling to a merchant's desired reporting software package. The reports generated by Geerlings do not involve customers of two or more merchants. The reports further do not involve prospective customers of one or more merchants.

Dedrick describes the use of demographic information which is referred to as user profile data. This demographic data represents existing customers and does not represent prospective customers. Kravitz does not describe compiling demographic data based on interactions between customers and merchants. Kravitz also does not describe storing demographic data representing existing and/or prospective customers of two or more merchants in a demographic database, nor does it describe the generation of a report

giving characteristics and other information about actual and/or prospective customers of one or more merchants.

It is not obvious to combine Geerlings, Dedrick and Kravitz in order to generate reports including demographic data representing the customers of two or more merchants. Even if Geerlings, Dedrick and Kravitz are combined, the result does not render obvious generating a report including demographic data representing the customers of a merchant.

Similar considerations apply to claim 30.

Referring to item 15, US patent 5,809,144 to Sirbu et al describes a method and apparatus for purchasing and delivering digital goods over a network. As described from column 3, line 64 to column 4, line 1, both customers and merchants make use of financial institutions to make transactions.

We propose to cancel claim 8 and claim 23. New claim 31 introduces the feature that the customer identifier could include a customer account number obtained from a financial institution and new claim 32 introduces the feature that the merchant identifier could include an account number of the merchant obtained by a financial institution. This feature, in combination with claim 7 and claim 1, provides a method and system which is not obvious even if Dedrick, Kravitz, Geerlings and Sirbu are combined.

Kravitz describes a method for making electronic payment for goods purchased online through an agent. In column 7, lines 21 to 25, the customer sends data to an agent which includes a unique identification of the customer. Column 28, line 16, describes the use of a merchant identifier. There is no suggestion in Kravitz that this interaction data stored in an interaction database includes both a customer identifier and a merchant identifier. In fact, the main focus of Kravitz is to facilitate secure payment for goods over the Internet. Storing both customer and merchant identifiers in a common database would lead to the potential for fraudulent transactions. Kravitz therefore teaches away from including both customer identifier and merchant identifier in a set of interaction data which is stored in an interaction database.

Furthermore, it is not obvious to combine Kravitz and Dedrick. Dedrick does not uniquely identify merchants and there is no suggestion or advantage describing Dedrick for identifying such merchants.

We submit that it is not obvious to combine Dedrick, Kravitz, Geerlings and Sirbu. Similar considerations apply to new claims 37 and 38.

Referring to item 16, claim 9 includes the feature that interactions stored in the interaction database include communications between customers and merchants provided by one or more telecommunications service providers. US patent 5,963,625 to Kawecki et al describes a method for providing called service provider control of caller access to pay services. The method involves a telecommunications service provider. It is not, however, obvious to combine Dedrick, Kravitz, Geerlings and Kawecki and claim 9 represents a non-obvious improvement over the combination of these four references. Similar considerations apply to claim 24.

We propose to cancel claims 10 and 25. Similar considerations apply to new claims 33, 34, 39 and 40 in which the customer identifier and merchant identifier comprise telephone numbers.

Referring to item 17, we propose to cancel claims 10 and 25 and insert new claims 33, 34, 39 and 40. Kawecki et al teaches the use of telephone numbers and the storing of these telephone numbers by a telecommunications service provider. It does not follow that it is obvious to combine Kawecki with Kravitz resulting in the subject matter of claims 33, 34, 39 and 40.

Referring to item 18, US patent 5,974,398 to Hanson et al et al describes a method and apparatus to enable Internet-based advertising. The Hanson et al system involves a data network and a communication service provider as described in column 2, lines 58-63. However, it is not obvious to combine Hanson et al with Dedrick and Kravitz to arrive at the subject matter of claim 11.

Similar considerations apply to claim 26.

Referring to item 19, we propose to cancel claims 12 and 27 and insert new claims 35, 36, 41 and 42. US patent 6,252,869 to Silverman describes a data network security system and method. Silverman, from column 7, line 66, to column 8, line 3, describes the use of an Internet protocol address for identifying a user on the Internet. The focus of the Silverman system is on data network security. It is not obvious to combine Silverman with Kravitz and Hanson et al to arrive at the subject matter of claims 35, 36, 41 and 42.

Referring to item 20, U.S. Patent No. 5,661,516 to Carles describes a device and method of distributing commercial messages to an individual addressable subscriber terminal on a network. Carles, in column 5, lines 11-14, describes the use of census data. However, the Carles system is focused on on-demand consumer-ordered televisions and particularly relating to distributing advertising and commercial messages in such an environment. It is not obvious to combine Geerlings, Dedrick and Carles in order to arrive at the subject matter of claim 13.
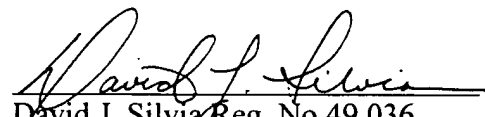
Similar considerations apply to claim 28.

Therefore, it is respectfully submitted that all of the claims pending in this application, namely claims 1-3, 5, 6, 7, 9, 11, 13-18, 20-22, 24, 26, 28-42, are directed to patentable subject matter, and allowance thereof is earnestly solicited.

If after reviewing this amendment, the Examiner believes that a telephone or personal interview would facilitate the resolution of any remaining matters the undersigned attorney may be contacted at the number set forth hereinbelow.

Respectfully submitted,

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